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Clinician Specialty and Treatment Style for Depressed Outpatients

With and Without Medical Comorbidities

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Running head: TREATMENT STYLE FOR DEPRESSION

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ABSTRACT

Background.--The advent of clinical practice guidelines for depression increases the importance of understanding variation across clinician specialty groups in treatment style for depression, and the role of medical comorbidities in such treatment style.

Methods.--Data are from clinician self-report (N = 470) and patient self-report (N = 2,545). Multiple regression was used to compare treatment style (counseling and antidepressant medication) of family physicians compared to psychiatrists, medical subspecialists, internists, psychologists, and other therapists, for patients with different medical comorbidities.

Results.--Relative to other primary care specialties, family physicians had the strongest preferences for both counseling and medicating depressed patients. Family physicians reported preferences for treating with antidepressant medication that were similar to psychiatrists; but in actual practice, medication rates were higher for psychiatrists than family physicians. Mental health specialists reported the strongest counseling preferences and provided the most counseling in actual practice, compared to general medicine physicians. Internists and subspecialists had similar preferences for medicating but compared to internists, subspecialists had lower preferences for counseling. Clinician preferences for counseling were similar for depressed patients with or without medical comorbidities, but preferences for antidepressant medication were lowest for patients with depression plus myocardial infarction, compared to other patient groups.

Conclusions.--Measures of clinician treatment style for depression are good proxies for counseling but not for medication practices. Among general medical specialists, family physicians have the strongest reported preferences to treat depression, but especially in terms of medication, do not always do so. Preferences for treatment were similar across patients with and without medical comorbidities. Findings have implications for improving the quality of care for depressed patients.

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Depression is one of the most common problems encountered by mental health specialists and general medicine physicians in primary care practices^{1,2} with a 1-year prevalence rate of 9.5 percent in the general population.³ Moreover, up to half of all mental health outpatient care is provided by general medicine physicians.^{4,5}

Despite recent advances in the diagnosis and treatment of depression, and the increased availability of pharmacological and psychosocial treatments for major depression, depressed patients in primary care settings⁶ and even in the mental health specialty sector⁷ may not receive appropriate care. The low rate of detection by primary care clinicians⁸ as well as lack of knowledge about depression treatments in the general medical sector may explain this undertreatment. For example, less than one half of acutely depressed patients in primary care practices receive even brief counseling^{7,8} and only one-third to half of depressed patients with diabetes are recognized⁹ and treated.¹⁰ In addition, many depressed patients do not receive antidepressant medications⁹ and dosage levels below the recommended minimum are often used.¹¹⁻¹² Medical comorbidities may contribute to such undermedication. For example, antidepressants are contraindicated immediately after a myocardial infarction,¹³ even though depressed patients with heart disease at a later stage can often be treated safely and effectively with antidepressants.¹⁴⁻¹⁵ Antihypertensive medications taken in conjunction with antidepressants may either intensify or counteract the effect of the hypertension treatment.¹⁶

To address these treatment problems, clinical practice guidelines for the diagnosis and treatment of depression have been developed for both the primary care sector¹⁷ and the mental health specialty sector.¹⁸ The primary care guidelines give considerable attention to medical comorbidity. These guidelines recommend full treatment of the nonpsychiatric illness, followed by reevaluation, and treatment of the major depression as an independent disorder if the medical illness is still present.¹⁷

This paper focuses on specialty differences in clinicians' preferences and practice patterns for treating depressed outpatients with and without medical comorbidities. Specifically, we examine whether there are differences by specialty in clinicians' treatment

style for depression (preferences and actual practice in prescribing antidepressant medication and in providing face-to-face counseling). We also examine whether these medication and counseling preference patterns differ for patients with depression only compared to patients who have depression plus a medical comorbidity.

Studies have identified substantial variation by specialty in treatment style regarding the use of antidepressant medications.^{11-12,19-20} For example, in some studies primary care clinicians were more likely to prescribe minor tranquilizers than antidepressants whereas psychiatrists prescribed more antidepressants,¹⁹ and antidepressant use was highest among patients of psychiatrists. Among general medicine physicians, antidepressant medication use was highest for the more severely depressed patients.¹¹ However, the increased number of antidepressant medication visits in the last decade is attributable to increased prescribing behavior of primary care physicians and some recent studies suggest primary care clinicians may be more likely to prescribe antidepressant medications than minor tranquilizers to patients they diagnose as depressed.²⁰

Counseling for depression also differs considerably by specialty. Elsewhere, we report that psychiatrists and psychologists reported better psychosocial counseling skill, had longer counseling sessions, and perceived more benefits from treating depression than primary care physicians (Meredith et al., submitted for publication). But in studies limited to primary practice, rates of counseling for patients of family physicians and internists were three times higher than that for other primary practitioners,²² and family physicians spend up to 40% of their time dealing with psychiatric problems.²³ Thus family physicians might be especially likely, among primary care physicians, to counsel depressed patients.

There are important gaps in the literature on specialty differences. First, there is little available information about differences by clinician specialty in attitudes or preferences, and in the relationship to reported practice. Second, past studies have generally compared specialties solely within the mental health specialty sector or within the primary care sector but cross-sector comparisons are useful to understand how depressed patients are treated overall

within a system of care. Third, comparisons of treatment practices often rely exclusively on depressed patients as identified by clinicians.²⁰ However, it is also important to understand the implications of treatment style difference for all depressed patients--recognized and unrecognized. One strength of this study is that it was possible to examine treatment style for all depressed patients, whether recognized or not.

Another focus of this paper is on the role of medical comorbidity in treatment style for depression. One reason often cited for lower rates of detection and treatment of depression in primary care is that medical comorbidity complicates assessment and diagnosis.^{16,24-29} For example, depression is often underdiagnosed in patients who have a medical comorbidity and this may be due to either patient factors such as somatization or from being unreceptive to seeking care for personal and emotional problems or clinician factors such as limited knowledge and awareness or to a reluctance in providing such care. In addition, some comorbidities may lead to worse outcomes in terms of course of depressive symptoms.³⁰⁻³² Past studies tended to focus on only a single medical comorbidity but in the present study, we compare treatment style for patients with no comorbidity, myocardial infarction, hypertension, or diabetes. These are among the most common chronic medical conditions in all health care settings.²⁹

We hypothesized that the strongest preferences for counseling depressed patients and the highest actual counseling rates are among psychiatrists, psychologists, and other therapists. Among general medicine clinicians; we expected counseling preferences to be highest for family physicians. For antidepressant medication, we expected the strongest treatment preferences among psychiatrists, followed by family physicians and general internists, and the weakest preferences for psychologists and other mental health therapists who are not trained or licensed to provide this type of treatment. We also expected weaker preferences for prescribing antidepressant medication to patients who have a medical comorbidity, but did not expect differences in counseling preferences by medical comorbidity.

Method

Data and Sample

The data are from the Medical Outcomes Study (MOS), an observational study designed to compare the processes and outcomes of care of adult patients in different healthcare delivery systems (Health Maintenance Organizations-HMOs, large multispecialty groups-LMSGs, and solo practices-SOLO) in three geographic sites (Los Angeles, Boston, and Chicago). Within each system of care, a representative sample of 523 physicians was selected from specialties of family medicine, general internal medicine, cardiology, endocrinology, psychiatry, and clinical psychology. Participation rates for eligible clinicians were moderate to high: 87% for HMOs, 67% for multispecialty groups (MSGs), and 62% for solo and small group practices, indicating a representative sample with rates higher than in other studies of this type.^{38,39} Patient participants were a representative cross-section of 21,481 adults visiting study providers during an average 9-day period. During this time, patients and providers completed screening questionnaires following the office visit. Both doctor and patient information from these instruments were used to identify those with hypertension, diabetes, heart disease, or depression. Additional details about the conceptual framework, study design, and data collection methods can be found in Tarlov³³ and Rogers.³⁴

Analyses were restricted to all enrolled clinicians who also completed a Clinician Background Questionnaire (N = 470 of the 523 study clinicians) administered during the Fall of 1986. The average age of this sample was 40 (55% were 40 or younger), 22 percent were women, and 12 percent were nonwhite. Previous analysis of response status indicated no significant differences between the 470 physicians who completed the instrument and the 53 who did not.²¹

The average unadjusted clinician characteristics (standard errors shown in parentheses) for this sample by specialty are shown in Table 1. A substantially higher proportion of the 24 non-medical therapists were female than any other clinician group (83% compared to 22% overall) and only five percent of medical sub-specialists were female. Family physicians were

significantly more likely to be nonwhite and younger; and to have the highest patient load than other types of clinicians. Not surprisingly, a greater proportion of depressed patients are seen by psychiatrists (26%) and psychologists (19%) than by general medicine physicians (6-7%) and other therapists (11%).

Clinician Specialty

We used a 6-category specification for clinician specialty: (1) psychiatrists, (2) subspecialists (cardiologists and endocrinologists), (3) family physicians, (4) general medical internists, (5) psychologists, and (6) other non-medical therapists (mental health nurses, nurse practitioners, and psychiatric social workers).

Measures

Measures of clinicians' reported preferences for providing antidepressant and counseling treatment for their patients with depression were obtained from clinician self-report questionnaires administered during the Fall of 1986. Actual practice measures were derived from two sources. Counseling rates are based on encounter forms completed by the clinician after the patient screening visit and medication rates are from patient reports approximately three months after the screening visits. A summary of these measures and their properties is provided in Table 2 and they are described briefly here.

Treatment Style. We measured two types of preferences for treating depression with antidepressant medication and face-to-face counseling. Clinicians rated (from 1-5) the likelihood of providing each type of treatment for each of four patient groups (depression, no major medical illness; and depression co-occurring with either recent myocardial infarction, hypertension, or diabetes). Individual items were scored as the percent of clinicians reporting that they were "somewhat" or "very likely" to treat each type of depressed patients. Two multi-item scales were derived by averaging original items across patient groups and rescaling scores to range from 0-100. These scales had excellent reliability (Cronbach's $\alpha = .88$ for medication and $\alpha = .97$ for counseling). Clinicians' perceptions about how much experience they had treating moderate to severe depression in patients who also have a major medical

illness was measured from 1 to 4 (and rescaled to range from 0-100) where a high score indicated more experience.

Actual Practice. We also measured clinicians' actual practice in counseling and medicating depressed patients. For each clinician, we identified their depressed patients using two strategies. First, depressed patients were defined as those exceeding an established cut-point on an 8-item brief self-report depression symptom scale completed by 22,093 patients at the time of the office visit.³⁷ The scale is based on items from the Center for Epidemiologic Studies Depression Scale and the Diagnostic Interview Schedule and measures intensity of symptoms of depression over the past week and periods of depressed mood over the past year. The cutpoint has high sensitivity and good positive predictive value for identifying current major depression or dysthymia in both mental health specialty and primary care settings. The validity of the screener was examined using data from the Epidemiologic Catchment Area Study (ECA) and the Psychiatric Screener Questionnaires for Primary Care (PSP) study. In each data base, sensitivity and positive predictive values were examined separately for primary care and mental health outpatients. The screener had sensitivities over 85 in each study and setting and positive predictive values for depression between 20 percent (primary care) and 50 percent (mental health specialty) in both studies. This definition provides a view of depressed patients whether recognized or not. The second definition was based on clinician report that the patient had a clinically meaningful depression for two weeks or more. This afforded a view of patients recognized as depressed. Using each definition, for each clinician, we identified the percentage of such patients counseled for depression for three minutes or more during the office visit; and the percentage using antidepressant medication in the prior month or daily for a month or more out of the prior six months, based on interviews of a subset of patients (N = 2,545) by a study clinician.¹¹ In sensitivity analyses, we determined that major conclusions were unaffected by statistical adjustment for average sickness of patients in the clinician's practice (i.e., measures of casemix). Therefore, we present unadjusted results.

Data Analysis

Our analysis plan involved three approaches. We first examined specialty differences in treatment preferences and actual practice regarding medication and counseling of depressed patients. We then examined these treatment preference patterns at the item level to determine whether there were differences across patient groups (depression with and without comorbidity). We report adjusted treatment style for depression using multiple regression methods controlling for a standard set of covariates: study site, organizational characteristics (specialty, system, and type of payment), and clinician sociodemographic characteristics (gender, age, race). We also examined the sensitivity of our models to the clinical characteristics of their patients, by testing the inclusion of a patient-level aggregate measure for the average probability of having current depressive disorder. To illustrate differences in treatment preferences and practice patterns, we used the parameters of the regression models to generate predictions for each group of clinicians, controlling for all covariates.

Results

Specialty Differences in Treatment Style and Actual Practice

Table 3 summarizes the specialty differences in treatment preferences (the mean of scores across all patient groups with and without medical comorbidity) and actual practice patterns (percent treated). These means and percentages are adjusted for study site, organizational characteristics, and clinician sociodemographics (see Method).

Psychiatrists and family physicians reported the strongest preference for medicating their depressed patients (10 to 42 points higher than other specialties), and not surprisingly, psychologists and other therapists reported the lowest preferences, with general medical clinicians intermediate. Based on actual practice patterns, depressed patients of psychiatrists were much more likely (50-56%) than those of other clinicians (14-21%) to use antidepressant medication. When depression was identified by the doctor's own report (recognized case), depressed patients of family practitioners were more likely than those of general internists to use antidepressant medications (31% versus 18%, $p < .05$); but this difference was not

significant when depression was defined as all cases (recognized and unrecognized combined). Thus, the greater tendency of family physicians to medicate was limited to detected cases, but this did not translate into a higher percentage of all cases, because family physicians were actually less likely to recognize depression.

As expected, psychiatrists and psychologists had the strongest preferences for counseling depressed patients (scoring 28-56 points higher) than other specialty groups. Family physicians had the next highest scores for counseling preference and these were as strong as the preferences of Masters-level therapists. Sub-specialists were the least likely to report counseling their depressed patients (39.2). In actual practice psychiatrists and psychologists counseled nearly all of their depressed patients, but psychiatrists were most likely to rely both on antidepressant medications and counseling to treat depression. Psychiatrists and psychologists were the most likely to personally counsel their depressed patients (93% and 98% of such patients, compared to 32-64% for other clinician groups, $p < .001$). Among primary care clinicians, family physicians counseled a higher percentage of depressed patients (40% based on all cases) than did general internists (32%, $p < .05$). A similar finding was observed among recognized cases.

Correlations between clinician preferences i.e., their reported likelihood of counseling and medicating, and their actual practices with patients were high ($r = .60$) for counseling, but low ($r = .20$) for antidepressant medication; all clinician groups overreported their tendencies to medicate depressed patients.

An examination of detection rates by general medical specialty indicated that, among general medicine physicians, family practitioners were least likely to identify depression in their patients (32%) followed by internists (36%), and sub-specialists (40%).

Specialty Differences in Treatment Style and Actual Practice Patterns by Medical Comorbidity

As shown in Table 4, compared to other patient groups, the percentage of clinicians who reported that they were somewhat or very likely to prescribe antidepressant medications was

much lower for patients with depression who also had a recent myocardial infarction across all specialties (6-36% vs. 18-92%). However, the specialty pattern for medication preference did not vary across patient groups. Counseling preferences did not vary by medical comorbidity.

Mental health specialists had a stronger relative preference for counseling over medicating when treating depression in each patient group. Primary care clinicians reported stronger preferences for medicating than for counseling depressed patients with no medical comorbidity, but the opposite is true of depressed patients with myocardial infarction. However, family physicians had the strongest medication preferences for depressed patients with myocardial infarction, stronger even than among psychiatrists.

Psychiatrists reported having the most experience with treating patients with depression plus a medical comorbidity, scoring between 17.4 and 29.5 points higher than other specialties ($p < .05$). Other differences were not significant.

Discussion

We found that clinician attitudes about treating depression varied by specialty and that these preference patterns varied little for patients with and without medical comorbidity (except myocardial infarction). In addition, counseling preference scores were good predictors of actual counseling, but medication preference scores were not a good proxy for actual medication use patterns. Specifically, we found: (1) Compared to other specialties, family physicians, like psychiatrists, reported the strongest preferences for using antidepressant medication; but in actual practice, only psychiatrists were more likely to medicate their depressed patients. (2) Among general medical clinicians, family physicians reported the strongest counseling preferences, second to psychiatrists and psychologists, but their actual counseling rate was much lower than the reported preference and no higher than among other general medical clinicians; (3) All clinicians were least likely to report prescribing antidepressant medication for their depressed patients who also had a myocardial infarction.

Family Physicians Had Strong Preferences for Medicating Depressed Patients but Actual Rates Depended on Recognition

As we expected, general medicine physicians, with the exception of family physicians, reported a lower inclination to medicate their depressed outpatients, relative to psychiatrists. The stronger preferences for psychiatrists to medicate is consistent with their training and focus of their practice. A possible explanation for the strong preferences of family physicians for medication is that most training in family medicine programs include behavioral science curricula (which may include psychiatry) and their attitudes may be influenced by the greater expectations for psychosocial care resulting in the practice setting, or they may simply have acquired greater knowledge during training.^{38,39} However, education may not fully explain specialty differences since clinicians self-designated their specialty in this study; reported specialty could differ from actual training.⁴⁰ For example, family practitioners may also self-select the specialty because it is based on a stronger orientation toward psychological issues. Nevertheless, family practice clinicians did not medicate depressed patients as much as psychiatrists did in actual practice. These findings imply that some general medicine physicians may overstate their own medicating practices, possibly due to a socially desirable response bias. Alternatively, their actual practice could reflect values held prior to training.⁴¹ In addition, patients of family physicians may be more resistant to taking antidepressant medication, for example due to being less aware of their depression, compared to patients of psychiatrists.⁴² Finally, this finding is limited by the use of the 8-item depression screener in the MOS which cannot be used as a gold standard for detection of depression. With a positive predictive value of only 20 percent for primary care patients (compared to 50% for mental health specialists), a lower medication rate would be expected for family physicians compared to mental health providers.

To determine whether or not family practitioners were better at other aspects of treating depression, we examined detection rates. Our finding that, among general medicine physicians, family practitioners were least likely to identify depression in their patients may be explained, in part, by greater somatic symptoms of their patients--but in fact, we have shown elsewhere that all depressed patients, including those of mental health specialists, have a high

rate of medical comorbidity.²⁹ Thus, continued education about the role of recognition of depression--in addition to education about medication, for example through practice guideline dissemination--is important in family practice.

Psychiatrists and Psychologists Had More Favorable Attitudes Towards Counseling Depressed Patients and Actually Counseled More

One explanation for the wide specialty variation in counseling preferences is that the nature of the counseling provided differed by specialty. Meredith et al. (submitted) found that general medicine physicians were better at providing health habits counseling while mental health specialists were better at providing psychosocial counseling. In this study, subspecialists and general medical internists were more likely to counsel (relative to medicate) depressed patients who also had medical comorbidities perhaps because the counseling was medically oriented. That is, clinicians in these specialties with these patients may not be counseling the mental health aspects of their patients and are instead focusing on issues such as recommendations for healthier lifestyles (e.g., recommendations to lose weight, eat a healthier diet, exercise, or lose weight).

Clinicians Were Least Likely to Report Prescribing Antidepressant Medication for Their Depressed Patients Who Also Had a Myocardial Infarction

We hypothesized that clinicians' preferences to provide appropriate treatment for depression would vary across patient groups and in particular, that medication use would be lower for their depressed patients who also had a myocardial infarction than for other depressed patient groups. We found this to be true of MOS clinicians. Clinicians may prescribe medication less often for their depressed patients who have had a myocardial infarction because they were concerned about cardiac side effects associated with antidepressant drugs, especially, arrhythmias. However, the preference patterns for depressed patients with a myocardial infarction were higher for psychiatrists perhaps due to the greater amount of specific training in this discipline. Psychiatrists also reported having far greater experience in treating depressed patients with medical comorbidity lending support for

the idea that experience may change attitudes. While clinicians may anecdotally say that comorbidity impedes treatment, we found no evidence that co-occurring medical conditions affected reports of usual practice style (except for myocardial infarction). Further, an analysis of actual medication practice in the MOS indicates that these clinicians were no less likely to use antidepressant medication for their depressed patients with a prior myocardial infarction than for other depressed patients.²⁹ Finally, because these data are from 1986 (just as newer antidepressant medications were introduced), they may underestimate rates of medication for such patients due to the lower availability of drugs without cardiac effects compared to now.

The findings emphasize the importance of understanding the link between variation in treatment style and patient outcomes, and the potential value of practice guidelines for reducing inappropriate variation in practice style. Programs such as the NIMH Depression, Awareness, Recognition, and Treatment Program⁴³ to educate health professionals about effective treatment are other important efforts designed to improve care. Future studies should evaluate the effects of alternative strategies to implement practice guidelines for depression in everyday medical practice⁴⁴ as well as the effects of patient and clinician education programs.

Results from this study cannot determine whether the attitudes of clinicians reflected by their medication and counseling preferences are a direct result of what was learned in medical school or whether they result indirectly from the values endorsed by a system that emphasizes competing priorities for clinical practice. As Eisenberg⁴⁵ suggests, clinicians may adopt value priorities based on a "hidden" curriculum defined by the values of faculty members and by the incentive structures that encourage more diagnostic testing and a focus on physical complaints over sensitivity to emotional distress. In light of the high prevalence of depression, yet moderate detection of depression in the offices of primary care providers, improving the recognition and management of depression is an important objective for improving quality of care. A better understanding of how clinicians' attitudes influence their practice decisions will help target future efforts to improve quality of care.

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Table 1
Clinician Characteristics by Specialty^a

Clinician Characteristic	Clinician Specialty						All Clinicians
	Psychiatry	Medicine Sub-Specialty ^b	Family Practice	General Internal Medicine	Psychology	Other ^c	
N	76	64	91	194	74	24	523
% Female ^{***}	15.7 (4.4)	4.9 (2.8)	16.3 (4.0)	23.6 (3.1)	22.0 (5.1)	83.3 (7.8)	21.6 (1.8)
% Nonwhite*	10.5 (3.5)	12.5 (4.2)	20.9 (4.3)	12.4 (2.4)	2.7 (1.9)	12.5 (6.9)	12.2 (1.4)
Mean age in years ^{***}	40.6 (0.5)	42.3 (1.0)	37.7 (0.5)	39.6 (0.5)	41.9 (0.6)	42.3 (1.7)	40.2 (0.3)
HMO (%) ^{d***}	18.4 (4.5)	7.8 (3.4)	24.2 (4.5)	38.1 (3.5)	29.7 (5.3)	83.3 (7.8)	30.0 (2.0)
LMSG (%) ^d	10.5 (3.5)	18.8 (4.9)	12.1 (3.4)	21.6 (3.0)	9.4 (3.4)	16.7 (7.8)	16.1 (1.6)
SOLO (%) ^{d***}	71.0 (5.2)	73.4 (5.6)	63.7 (5.1)	40.2 (3.5)	60.8 (5.7)	0.0 (0.0)	53.9 (2.2)
Los Angeles (%) [*]	27.6 (5.2)	50.0 (6.3)	37.4 (5.1)	27.3 (3.2)	29.7 (5.3)	29.2 (9.5)	32.3 (2.0)
Boston (%) ^{***}	40.8 (5.7)	23.4 (5.3)	23.1 (4.4)	41.2 (3.5)	41.9 (5.8)	66.7 (9.8)	37.1 (2.1)
Chicago (%) [*]	31.6 (5.4)	26.6 (5.6)	39.6 (5.2)	31.4 (3.3)	28.4 (5.3)	4.2 (4.2)	30.6 (2.0)
Mean % prepaid patients ^{***}	30.2 (4.1)	17.6 (3.5)	41.2 (4.0)	54.1 (2.9)	40.3 (4.8)	95.5 (2.2)	43.8 (1.8)
Mean # outpatients/week ^{***}	33.4 (1.6)	53.2 (3.7)	93.8 (4.3)	72.2 (4.3)	29.4 (1.5)	46.8 (4.0)	60.4 (2.1)
Mean % depressed patients ^{***}	25.9 (1.4)	6.5 (0.6)	6.9 (0.4)	6.6 (0.4)	19.3 (1.0)	11.0 (1.9)	11.4 (0.4)

Notes. ^aStandard errors are shown in parentheses.

^bendocrinologists and cardiologists.

^cnon-medical therapists (mental health nurses, psychiatric social workers, and nurse practitioners).

^dHMO = Health Maintenance Organization; LMSG = large multispecialty group; SOLO = solo practices.

* = $p < .05$; ** = $p < .01$; *** = $p < .001$.

Table 2
Description and Properties of Treatment Style and Actual Practice Measures for Depression

Measure ^a	Sample Item/Definition	N	Mean	SD
<u>Treatment Style</u>				
<i>Preferences for treating depression with:</i> ^b				
Antidepressant medication	For <u>each</u> of the following patient groups (depression, no major medical illness; and depression co-occurring with either recent myocardial infarction, hypertension, or diabetes), how <u>likely</u> are you to prescribe tri(hetero)cyclic antidepressants to treat moderate to severe depression?	384	59.4	26.8
Face-to-face counseling	For <u>each</u> of the following patient groups, how <u>likely</u> are you to provide ongoing (three or more visits), face-to-face counseling to treat moderate to severe depression?	421	67.4	35.8
Perceived experience with treating depressed patients with medical comorbidity ^c	How much experience do you have treating moderate to severe depression in patients who also have a <u>major medical illness</u> ?	426	68.2	22.6
<u>Actual Practice</u>				
<i>Based on study criteria:</i>				
	Among patients exceeding cut-off on depression screener:			

Percent using medications	Percent reporting use of an antidepressant medication	383	18.9	31.0
Percent counseled	Percent counseled for depression for 3 minutes or more	511	55.3	37.0
<i>Based on clinician diagnosis:</i>				
Percent using medications	<i>Among patients identified by the clinician as having clinical depression:</i>	315	25.3	36.4
Percent counseled	Percent counseled for depression for 3 minutes or more	500	72.4	31.6
Percent of depressed patients detected	Percent of patients identified as depressed by the clinician among those exceeding screener cutoff for depression	512	49.8	34.1

Notes. ^aMeasures are not directly comparable due to differing numbers of missing data.

^bMeans and standard deviations for treatment preferences are provided for the aggregate measures only (e.g., averaged across patient groups). Scores range from 0-100 where a higher score indicates stronger preference.

^cThis item was rescaled to range from 0-100 where a higher score indicates more experience.

Table 3
Specialty Differences in Treatment Style Preferences and Actual Practice With Depressed Patients

Measure	Clinician Specialty				
	Psychiatry	Medicine Sub-a Specialty	Family Practice	General Internal Medicine	Other ^b
<u>Treatment Style</u>					
Mean medication preference	69.1 ^a	52.0 ^{b,c}	69.2 ^a	59.5 ^b	27.1 ^d
Mean counseling preference	93.7 ^a	39.2 ^b	66.7 ^c	51.0 ^d	64.3 ^{c,d}
<u>Actual Practice</u>					
<i>Study Criteria:</i>					
Percent using medication	50.4 ^a	15.6 ^b	14.5 ^b	13.2 ^b	14.3 ^b
Percent counseled	93.2 ^a	36.8 ^b	40.3 ^b	32.4 ^b	64.1 ^c
<i>Clinician Diagnosis:</i>					
Percent using medication	55.6 ^a	18.2 ^b	31.0 ^b	18.2 ^b	21.2 ^b
Percent counseled	94.3 ^a	60.9 ^b	67.9 ^b	57.2 ^b	84.0 ^a

Notes. Averages are based on predictions from multiple regressions which adjusted for covariates. Means or percents in a given column for a given effect having the same superscript are *not* significantly different at $p < .05$.

^aendocrinologists and cardiologists.

^bnon-medical therapists (mental health nurses, psychiatric social workers, and nurse practitioners).

Table 4
Specialty Differences in the Percent of Clinicians Somewhat or Very Likely to Medicate or Counsel Their Depressed Patients With and Without Medical Comorbidity

Clinician Specialty	Type of Medical Comorbidity											
	None			Myocardial Infarction			Hypertension			Diabetes		
	Medication	Counseling	Medication	Counseling	Medication	Counseling	Medication	Counseling	Medication	Counseling	Medication	Counseling
All Clinicians	78.6	63.2	24.0	66.5	62.5	69.3	68.0	69.8				
Psychiatry	91.7 ^{a,c}	100.0 ^a	19.8 ^a	94.8 ^a	78.1 ^a	98.0 ^a	84.0 ^a	98.0 ^a				
Medicine Subspecialty ^a	63.3 ^b	13.3 ^b	30.5 ^{a,b,c}	43.8 ^b	52.2 ^b	38.1 ^b	55.0 ^b	35.2 ^b				
Family Practice	93.0 ^c	74.9 ^c	36.1 ^{b,c}	65.0 ^c	75.2 ^a	70.0 ^c	79.3 ^a	71.1 ^c				
General Internal Medicine	83.1 ^a	42.5 ^d	25.5 ^{a,b,c}	52.5 ^{b,c}	66.3 ^{a,b}	54.7 ^b	73.4 ^a	56.5 ^d				
Psychology	41.1 ^b	100.0 ^a	5.5 ^d	94.7 ^a	18.4 ^c	96.5 ^a	20.0 ^c	96.4 ^a				
Other ^b	43.2 ^b	67.2 ^c	5.7 ^{a,d}	48.3 ^{b,c}	20.4 ^c	74.8 ^c	29.8 ^{b,c}	76.4 ^c				

Notes. Averages are based on predictions from multiple regressions which adjusted for covariates. Percents in a given column for a given effect having the same superscript are *not* significantly different at $p < .05$.

^aendocrinologists and cardiologists.

^bMasters-level therapists (mental health nurses, psychiatric social workers, and nurse practitioners).

